

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (canceled).

9. (previously presented): A solder which bonds an electronic component to a circuit board by means of one or more processes selected from the group consisting of a reflow process, a flow process, a soldering iron, a soldering copper, and flip-chip process, comprising zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than 0.1, impurities, and the remainder of tin, said solder being lead-free and having a melting point of 210 °C or less.

10. (previously presented): The solder as set forth in claim 9, wherein said solder is in the form of powder.

11. (previously presented): The solder as set forth in claim 10, wherein said powder has a diameter in the range of 20 to 40 micrometers both inclusive.

12. (previously presented): The solder as set forth in claim 10, wherein a difference between a maximum diameter of said powder and a minimum diameter of said powder is equal to or smaller than 10 micrometer.

13. (previously presented): The solder as set forth in claim 10, wherein said solder is mixed in flux, said flux having a concentration in the range of 9 to 13 weight % both inclusive.

14. (canceled).

15. (previously presented): A solder which bonds an electronic component to a circuit board by means of one or more processes selected from the group consisting of a reflow process, a flow process, a soldering iron, a soldering copper, and flip-chip process comprising Sn-Zn alloy(s) having a single composition ratio or a plurality of composition ratios, and Sn-Bi-Ag alloy(s) having a single composition ratio or a plurality of composition ratios, said solder including zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than 0.1, impurities, and the remainder of tin when said alloys are melted in mixture, said solder being lead-free and having a melting point of 210 °C or less.

16. (previously presented): The solder as set forth in claim 15, wherein said solder is in the form of powder.

17. (previously presented): The solder as set forth in claim 16, wherein said powder has a diameter in the range of 20 to 40 micrometers both inclusive.

18. (previously presented): The solder as set forth in claim 16, wherein a difference between a maximum diameter of said powder and a minimum diameter of said powder is equal to or smaller than 10 micrometer.

19. (previously presented): The solder as set forth in claim 16, wherein said solder is mixed in flux.

20. (previously presented): The solder as set forth in claim 19, wherein said flux has a concentration in the range of 9 to 13 weight % both inclusive.

21. (previously presented): A circuit substrate unit comprising a circuit board, and at least one electronic component soldered onto said circuit board,
wherein said electronic component is soldered onto said circuit board through a solder,
and

said solder contains zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than 0.1, and the remainder of tin, said solder being lead-free.

22. (previously presented): The circuit substrate unit as set forth in claim 21, wherein said solder is in the form of powder.

23. (previously presented): The circuit substrate unit as set forth in claim 22, wherein said powder has a diameter in the range of 20 to 40 micrometers both inclusive.

24. (previously presented): The circuit substrate unit as set forth in claim 22, wherein a difference between a maximum diameter of said powder and a minimum diameter of said powder is equal to or smaller than 10 micrometer.

25. (previously presented): The circuit substrate unit as set forth in claim 22, wherein said solder is mixed in flux.

26. (previously presented): The circuit substrate unit as set forth in claim 25, wherein said flux has a concentration in the range of 9 to 13 weight % both inclusive.

27. (previously presented): A circuit substrate unit comprising a circuit board, and at least one electronic component soldered onto said circuit board,
wherein said electronic component is soldered onto said circuit board through a solder, and

said solder contains Sn-Zn alloy(s) having a single composition ratio or a plurality of composition ratios, and Sn-Bi-Ag alloy(s) having a single composition ratio or a plurality of composition ratios, said solder including zinc at 7 to 10 weight % both inclusive, bismuth at 1 to 6 weight % both inclusive, silver at X weight % wherein X is equal to or greater than 0.025, but smaller than 0.1, and the remainder of tin when said alloys are melted in mixture, said solder being lead-free.

28. (previously presented): The circuit substrate unit as set forth in claim 27, wherein said solder is in the form of powder.

29. (previously presented): The circuit substrate unit as set forth in claim 28, wherein said powder has a diameter in the range of 20 to 40 micrometers both inclusive.

30. (previously presented): The circuit substrate unit as set forth in claim 28, wherein a difference between a maximum diameter of said powder and a minimum diameter of said powder is equal to or smaller than 10 micrometer.

31. (previously presented): The circuit substrate unit as set forth in claim 28, wherein said solder is mixed in flux.

32. (previously presented): The circuit substrate unit as set forth in claim 31, wherein said flux has a concentration in the range of 9 to 13 weight % both inclusive.

33. (previously presented): The solder as set forth in claim 9, wherein said solder comprises said silver at 0.025 to 0.08 weight % both inclusive.

34. (previously presented): The solder as set forth in claim 15, wherein said solder comprises said silver at 0.025 to 0.08 weight % both inclusive.

35. (previously presented): The circuit substrate unit as set forth in claim 21, wherein said solder contains said silver at 0.025 to 0.08 weight % both inclusive.

36. (previously presented): The circuit substrate unit as set forth in claim 27, wherein said solder contains said silver at 0.025 to 0.08 weight % both inclusive.

37-42. (canceled).